

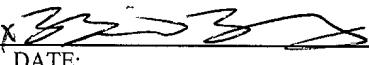
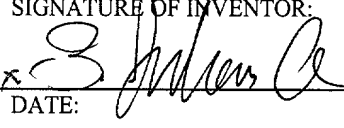
ATTORNEY'S DOCKET NO.
TI-31654

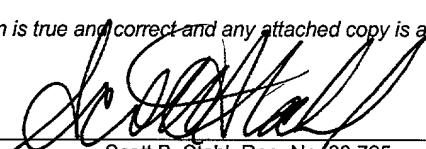
APPLICATION FOR UNITED STATES PATENT

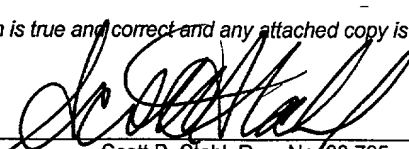
DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor if only one name is listed below, or an original, first and joint inventor if plural inventors are named below, of the subject matter which is claimed and for which a patent is sought on the invention entitled as set forth below, which is described in the attached specification; that I have reviewed and understand the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration; that no application for patent or inventor's certificate on this invention has been filed by me or my legal representatives or assigns in any country foreign to the United States of America; and that I acknowledge my duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, section 1.56(a);

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

TITLE OF INVENTION:		STRAY-INSENSITIVE, LEAKAGE-INDEPENDENT IMAGE SENSING WITH REDUCED SENSITIVITY TO DEVICE MISMATCH AND PARASITIC ROUTING CAPACITANCE	
POWER OF ATTORNEY:		I HEREBY APPOINT THE FOLLOWING ATTORNEYS TO PROSECUTE THIS APPLICATION AND TRANSACT ALL BUSINESS IN THE PATENT AND TRADEMARK OFFICE CONNECTED THEREWITH	
W. James Brady III, Reg. No. 32,080 Jay Cantor, Reg. No. 19,906 Bret Petersen, Reg. No. 37,417		Mark Courtney, Reg. No. 36,491 Dennis Moore, Reg. No. 28,885 Ron Neerings, Reg. No. 34,227 William Kempler, Reg. No. 28, 228 Dan Swayze, Reg. No. 34,478	
SEND CORRESPONDENCE TO: W. James Brady, III Texas Instruments Incorporated P. O. Box 655474, M/S 3999 Dallas, Texas 75265		DIRECT TELEPHONE CALLS TO: W. James Brady, III 972-917-4371	
NAME OF INVENTOR: (1) Zhengwei Zhang	NAME OF INVENTOR: (2) Zhiliang Julian Chen	NAME OF INVENTOR: (3)	
RESIDENCE (City and State Only) Plano, TX	RESIDENCE (City and State Only) Plano, TX	RESIDENCE (City and State Only)	
POST OFFICE ADDRESS 3917 Sunflower Lane Plano, TX 75025	POST OFFICE ADDRESS 3417 Walington Drive Plano, TX 75093	POST OFFICE ADDRESS	
COUNTRY OF CITIZENSHIP: P. R. China	COUNTRY OF CITIZENSHIP: P. R. China	COUNTRY OF CITIZENSHIP:	
SIGNATURE OF INVENTOR: 	SIGNATURE OF INVENTOR: 	SIGNATURE OF INVENTOR:	
DATE: X 12/20/2000	DATE: X 12/20/2000	DATE:	

FORM PTO-1595 Docket Number: TI-31654	RECORDATION FORM COVER SHEET Patents Only	U.S. Department of Commerce Patent and Trademark Office
To the Ass't Commissioner for Patents. Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Zhengwei Zhang Zhiliang Julian Chen	2. Name and Address of receiving party(ies): Name: Texas Instruments Incorporated Address: P. O. Box 655474 M/S 3999 City: Dallas, TX 75265 Country: United States of America Additional name(s) & address(es) attached? Yes <input checked="" type="checkbox"/> No	
3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date: December 20, 2000		
4. Application number(s) or patent number(s). <input checked="" type="checkbox"/> This document is being filed together with a new application. Execution date of the application: December 20, 2000 Title: STRAY-INSENSITIVE, LEAKAGE-INDEPENDENT IMAGE SENSING WITH REDUCED SENSITIVITY TO DEVICE MISMATCH AND PARASITIC ROUTING CAPACITANCE A. Patent Application No.(s) S.N. Additional number attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Name and address of party to whom correspondence concerning document should be mailed: W. James Brady, III Texas Instruments Incorporated P. O. Box 655474, M/S 3999 Dallas, TX 75265 Tel: (972) 917-4371 TI-31654	6. Number of applications and patents involved: <u> 1 </u> 7. Amount of fee enclosed or authorized to be charged: \$40. 8. Deposit Account No: 20-0668	
DO NOT USE THIS SPACE		
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <div style="display: flex; justify-content: space-between;"> <div> Date <u> 12/21/2000 </u> </div> <div style="text-align: center;">  Scott B. Stahl, Reg. No. 33,795 </div> </div>		
Total Number of Pages Including Cover Sheet, Attachments and Document: <u> 2 </u>		

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To the Ass't Commissioner for Patents. Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Zhengwei Zhang Zhiliang Julian Chen	2. Name and Address of receiving party(ies): Name: Texas Instruments Incorporated Address: P. O. Box 655474 M/S 3999 City: Dallas, TX 75265 Country: United States of America Additional name(s) & address(es) attached? Yes <input checked="" type="checkbox"/> No	
3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date: December 20, 2000		
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5. Name and address of party to whom correspondence concerning document should be mailed: W. James Brady, III Texas Instruments Incorporated P. O. Box 655474, M/S 3999 Dallas, TX 75265 Tel: (972) 917-4371 TI-31654	6. Number of applications and patents involved: <u> (1) </u> 7. Amount of fee enclosed or authorized to be charged: \$40. 8. Deposit Account No: 20-0668	
DO NOT USE THIS SPACE		
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <div style="display: flex; justify-content: space-between;"> <div> Date <u>12/21/2000</u> </div> <div style="text-align: center;">  Scott B. Stahl, Reg. No. 33,795 </div> </div> <div style="text-align: right; margin-top: 10px;"> Total Number of Pages Including Cover Sheet, Attachments and Document: <u>2</u> </div>		

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

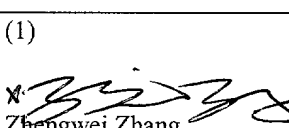
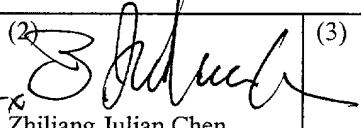
WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE OF INVENTION	STRAY-INSENSITIVE, LEAKAGE-INDEPENDENT IMAGE SENSING WITH REDUCED SENSITIVITY TO DEVICE MISMATCH AND PARASITIC ROUTING CAPACITANCE		
SIGNATURE OF INVENTOR AND NAME	(1) x  Zhengwei Zhang	(2)  Zhiliang Julian Chen	(3)
DATE	x 12/20/2000	x 12/20/2000	
RESIDENCE (City, County, State)	Plano, Collin County, Texas	Plano, Collin County, Texas	
DATE APPLICATION EXECUTED	x 12/20/2000	x 12/20/2000	

After recording return Assignment to:

W. James Brady, III
Texas Instruments Incorporated
P. O. Box 655474, M/S 3999
Dallas, TX 75265